

Naohiro Kato January 12, 2006

## SYLUBUS BIOLOGY 3090 Section 2 (Spring 2006)

**Call number:** 6715, **Course number:** BIOL 3090, **Section number:** 2, **Course title:** Cell Biology  
**Credit hours:** 3, **Time:** 12:10 pm -01:30 pm, **Days:** Tuesday & Thursday, **Room:** 0108 Nicholson

**Instructor:** Naohiro Kato

Assistant Professor, Department of Biological Sciences, LSU

Office: Room 226, Life Sciences Building, LSU, Baton Rouge, LA

Office Hours: By appointment

Email: kato@LSU.edu

Website: [http://www.biology.lsu.edu/faculty\\_listings/fac\\_pages/nkato.html](http://www.biology.lsu.edu/faculty_listings/fac_pages/nkato.html)

Contact Policy: Email is recommended.

### **Course Objective:**

The objective of this class is to understand the structures and functions of cells at molecular levels. By the end of the course, you should gain the knowledge necessary to take upper level classes in molecular and cell biology.

### **Textbook:**

Lodish *et al.*, *Molecular Cell Biology*, 5<sup>th</sup> edition. Published by W.H. Freeman and Company (NY), ISBN 0-7167-4366-3

### **Website:**

<http://blackboard.lsu.edu> BIOL3090 for Naohiro Kato

### **Examinations - the quarterly examinations- (total 450 points):**

**Four exams** will be given in class. The exams will have a combination of multiple choice, True/False, and matching questions, and may include short essays. **Each exam** will be worth **100 points** and **include material covered since the previous exam**. **The final exam** will have an **additional 50 points** in which questions are **drawn upon throughout the course**.

### **Make-up Exam:**

The make-up exam will be given only when an official documentation is provided that clearly indicates circumstances beyond a student's control. A note from a friend or family member is not acceptable documentation. By providing a written acceptable explanation prior to missing the exam, a student may be able to obtain an approval for the make-up from the instructor.

### **Daily Quizzes (total 150 points):**

A daily quiz composed of a single question given in class. By completing the answer sheet you will be considered "in attendance" for class that day. (6 points for correctly answered questions, 4 points for incorrectly answered questions.)

### **Homework credit: (maximum 50 points):**

Every after the lecture you have the option to **submit three multiple-choice questions** that may be used for the quarterly examinations. The questions must be based on the lecture given. **The questions must be submitted with the answers and supporting explanations**. The explanations of the answers must be from the textbook (the page references must be attached). The questions you create will be posted on the blackboard (<http://blackboard.lsu.edu>) so that other students can use them for their studies. **The deadline of the homework will be 12:00 am of the following lecture day**. The details are contained in the document, "Homework Credit".

**Grading:**

The final grade will be based on a total of 600 points (450 exam points + 150 daily quiz points). Your final grade will be based on your cumulative points. The homework credit points you obtained (max 50 points) could help your grade to be upgraded.

A: Equal or above 540 points ( $\geq 90\%$  of the total point)

B: 480 – 539 points ( $\geq 80\%$  of the total point)

C: 420 – 479 points ( $\geq 70\%$  of the total point)

D: 360 - 419 ( $< 70\%$  of the total point)

F: Below 359 points ( $< 60\%$  of the total point)

**Course Legal Statements:**

Dropping the course:

The final day of the dropping the course is April 3, 2006. A student may withdraw from the class on and before January 24, 2006 without receiving a grade of "W".

Equal Opportunity:

All qualified students have equal opportunity in class without regard to race, creed, color, marital status, sexual orientation, religion, sex, national origin, age, or veteran's status.

Disabilities:

A student having learning disabilities should consult the instructor and Office of Disability Services (<http://appl003.ocs.lsu.edu/slas/ods.nsf/TextOnly>).

Academic Integrity and Civility:

Code of Student Conduct issued by the Office of the Chancellor

([http://appl003.lsu.edu/slas/judicialaffairs.nsf/\\$Content/Code+of+Student+Conduct?OpenDocument#5.1](http://appl003.lsu.edu/slas/judicialaffairs.nsf/$Content/Code+of+Student+Conduct?OpenDocument#5.1)) will be applied.

**Memo:**

## Spring Semester 2006, BIOL3090 Section 2 Tentative Schedule

Date	Class	Chapter	Title	Pages
January 17, 2006	Tuesday	Class 1	Orientation	-
January 19, 2006	Thursday	Class 2	Life Begins with Cells	p1 - p28
January 24, 2006	Tuesday	Class 3	Protein Structure and Function	p59 - p99
January 26, 2006	Thursday	Class 4	Basic Molecular Genetic Mechanisms	p101 - p145
January 31, 2006	Tuesday	Class 5	Biomembranes and Cell Architecture	p147 - p196
February 2, 2006	Thursday	Class 6	Chemical Foundations	p29 - p57
February 7, 2006	Tuesday	Class 7		TBA
<b>February 9, 2006 Thursday 1st-Q Exam</b>				
February 14, 2006	Tuesday	Class 8	Good luck	
February 16, 2006	Thursday	Class 9	Molecular Genetic Techniques and Genomics	p351 - p403
February 21, 2006	Tuesday	Class 10	Molecular Structure of Genes and Chromosomes	p405 - p445
February 23, 2006	Thursday	Class 11	Transcriptional Control of Gene Expression	p447 - p491
February 28, 2006	Tuesday	Class 11		TBA
<b>Mardi Gras Holiday No Class</b>				
March 2, 2006	Thursday	Class 12		No Class
March 7, 2006	Tuesday	Class 13	Post-transcriptional Gene Control and Nuclear Transport	p493 - p531
<b>March 9, 2006 Thursday Mid-Semester Exam</b>				
March 14, 2006	Tuesday	Class 14	Good luck	
March 16, 2006	Thursday	Class 15	Signaling at the Cell Surface	p533 - p570
March 21, 2006	Tuesday	Class 16	Signaling Pathways That Control Gene Activity	p571 - p610
March 23, 2006	Thursday	Class 17	Integration of Signals and Gene Controls	p611 - p655
March 28, 2006	Tuesday	Class 18	Moving Proteins into Membranes and Organelles	p657 - p699
March 30, 2006	Thursday	Class 19	Vesicular Traffic, Secretion, and Endocytosis	p701 - p724
<b>April 4, 2006 Tuesday 3rd-Q Exam</b>				
April 6, 2006	Thursday	Class 20	Good luck	
April 11, 2006	Tuesday	Spring Break		TBA
April 13, 2006	Thursday	Spring Break		No Class
April 18, 2006	Tuesday	Class 21		No Class
April 20, 2006	Thursday	Class 22	Microfilaments and Intermediate Filaments	p779 - p815
April 25, 2006	Tuesday	Class 23	Regulating the Eukaryotic Cell Cycle	p853 - p897
April 27, 2006	Thursday	Class 24	Cell Birth, Lineage, and Death	p899 - p934
May 2, 2006	Tuesday	Class 25	Cancer	p935 - p973
May 4, 2006	Thursday	Conc. Study Period		TBA
<b>May 9, 2006 Tuesday Final Exam</b>				
			Good luck	